

CHAPTER D-4 RIVERINE EROSION

This chapter is under development. The Riverine Erosion presentation contains current screening level guidance evaluating risk related to these processes.

D-4.1 Key Concepts

- Objective: To develop an understanding of methods to evaluate erosion caused by river currents and waves. The erosion along an active waterway is influenced by soil properties and the properties of the flowing water.
- Erosion is characterized by a characteristic rate of erosion (length/time), which is a function of the erodibility (dimensionless) of the bank material and the hydraulic shear stress (force/area) exerted on the bank from the flow and waves.
- Soil type, moisture condition, vegetation, channel curvature, and armoring affect the resistance to erosion.

D-4.2 Reference

URS Corporation, Erosion Toolbox: Levee Risk Assessment Methodology prepared for United States Army Corps of Engineers, December 2007.